Project Planning Phase

Date	**25 October 2022**
Team ID	**PNT2022TMID08449**
Project Name	**IOT Based Smart Crop Protection System For Agriculture**
Maximum Marks	**8 Marks**

PRODUCT BACKLOG, SPRINT SCHEDULE, AND ESTIMATION (4 MARKS)

Use the below template to create product backlog and sprint schedule

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1		US-1	Create the IBM Cloud serviceswhich are being used in this project.	6	High	Abinaya, Akalya, Mohanraj, Sanjay, Shahil
Sprint-1		US-2	Configure the IBM Cloud serviceswhich are being used in completing this project.	4	Medium	Abinaya, Akalya, Mohanraj, Sanjay, Shahil,

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-2		US-3	IBM Watson IoT platform acts asthe mediator to connect the web application to IoT devices, so create the IBM Watson IoT platform.	5	Medium	Abinaya, Akalya, Mohanraj, Sanjay, Shahil
Sprint-2		US-4	In order to connect the IOT deviceto the IBM cloud, create a device in the IBM Watson IOT platform and get the device credentials.	5	High	Abinaya, Akalya, Mohanraj, Sanjay, Shahil
Sprint-3		US-1	Configure the connection securityand create API keys that are usedin the Node-RED service for accessing the IBM IOT Platform.	10	High	Abinaya, Akalya, Mohanraj, Sanjay, Shahil
Sprint-3		US-2	Create a Node-RED service.	10	High	Abinaya, Akalya, Mohanraj, Sanjay, Shahil
Sprint-3		US-1	Develop a python script to publishrandom sensor data such as temperature, moisture, soil and humidity to the IBM IOT platform	7	High	Abinaya, Akalya, Mohanraj, Sanjay, Shahil

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-3		US-2	After developing python code, commands are received just print the statements which represent thecontrol of the devices.	5	Medium	Abinaya, Akalya, Mohanraj, Sanjay, Shahil
Sprint-4		US-3	Publish Data to The IBM Cloud	8	High	Abinaya, Akalya, Mohanraj, Sanjay, Shahil
Sprint-4		US-1	Create Web UI in Node- Red	10	High	Abinaya, Akalya, Mohanraj, Sanjay, Shahil
Sprint-4		US-2	Configure the Node-RED flow toreceive data from the IBM IOT platform and also use Cloud ant DB nodes to store the received sensor data in the cloud ant DB	10	High	Abinaya, Akalya, Mohanraj, Sanjay, Shahil

PROJECT TRACKER, VELOCITY & BURNDOWN CHART: (4 MARKS)

Sprint	Total Story Points	Duration	Sprint StartDate	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	20	6 Days	24 Oct 2022	29 Oct 2022	20	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	20	05 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	20	12 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	20	19 Nov 2022

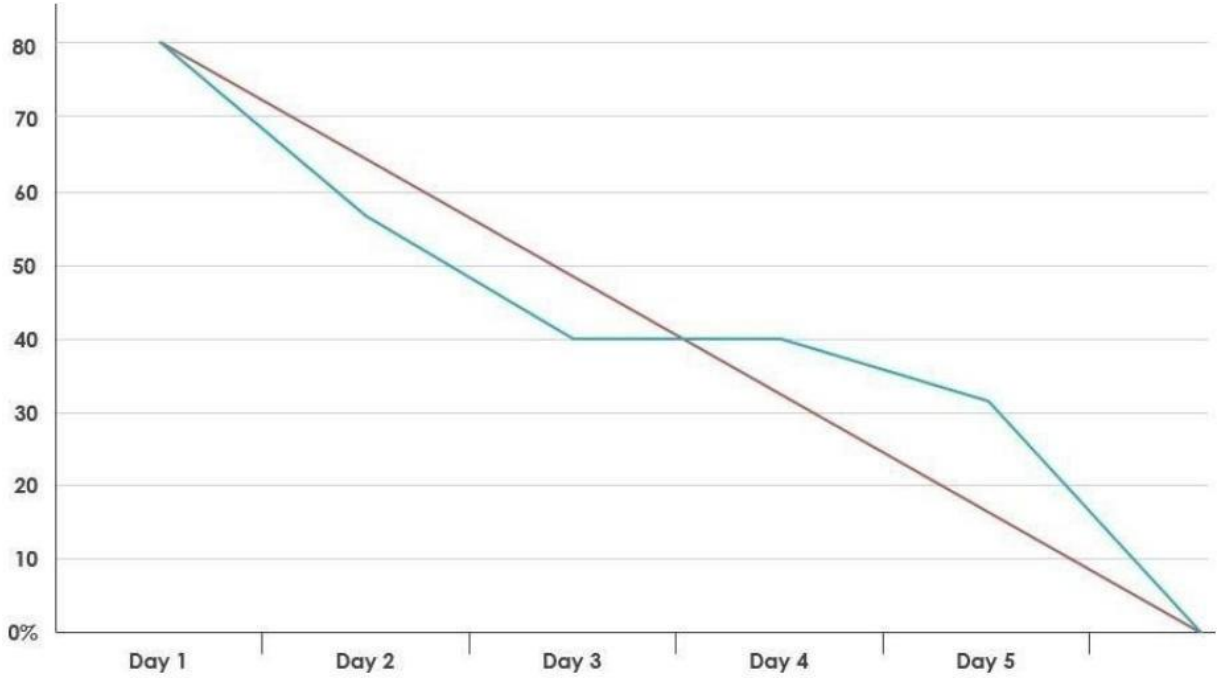
Velocity:

Imagine we have a 10-day sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

$$AV = \frac{sprint\ duration}{velocity} = \frac{20}{10} = 2$$

Burn down Chart:

A burn down chart is a graphical representation of work left to do versus time.It is often used in agile software development methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress overtime.


80
70
60
50
40
30
20
10
0%
Day 1
Day 2
Day 3
Day 4
Day 5